

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

In Re: Proposed Amendments to Air Pollution Control Regulation No. 37, entitled
“Rhode Island's Low Emission Vehicle Program”.

DECISION

Introduction

On October 31, 2005 notice was published in the Providence Journal and was mailed to interested parties announcing a public hearing and comment period to accept comments on the proposed amendments to Air Pollution Control Regulation No. 37. On November 7th a second notice was published in the Providence Journal clarifying the date of the Public Hearing as “Wednesday, November 30, 2005”. The public hearing was held on November 30, 2005. Written comments were entered into the record at the public hearing. The comment period closed at 4:00 pm of November 30, 2005. This decision will present the Department of Environmental Management’s response to comments and the final regulation for adoption. All written and oral submissions respecting the proposed regulation were fully considered. The following is a concise statement of the principal reasons for and against the proposed regulation's adoption, and will further incorporate the reasons for overruling the considerations urged against its adoption.

The Administrative Procedures Act requires agencies proposing to amend or promulgate regulations demonstrate the need for amendment or new regulation, demonstrate that no alternative approaches considered would be as effective and less burdensome, identify any overlapping or duplicate state regulations, and determine whether the amendment or new regulation would have significant adverse economic impact on small business or any city or town. Information to comply with those requirements was included in the Fact Sheet, which was available when the Notice of Public Hearing and Comment Period was published. The Fact Sheet is appended to this decision.

Response to Comments

This section will present the Department’s response to comments made at the public hearing and written comments received during the comment period. Comments were paraphrased and similar comments were grouped together. The Department's response follows each comment.

Comment: Of 232 comments received, either written or during oral testimony, 150 were positive in nature. Eleven of these positive comments provided individual programmatic support and the remaining 92 provided general support of the program. Positive comments included statements such as: “RI has a narrow window of opportunity to join other states and leaders in a fight against global warming, and we're urging today the Department to move ahead and finalize these proposed amendments by the end of the

year to be a part of that.”, and “... the proposed rule will be good for Rhode Island. It is pro-environment, pro-consumer, will improve public health, and help our economy.” Another commenter stated: “The most effective action available to Rhode Island [to reduce global warming] is to update our state's Clean Car Standard to reflect California's new global warming regulations, ...”

Response: Comments noted. No response necessary.

Comment: Several comments were submitted indicating that these regulations would have negative impacts on the U.S. auto industry because they will have to change their product lines to comply. Reduction in employment would be nationwide, as many as 55,000 U.S. jobs. Additionally, it was pointed out that certain of the large manufacturers will have a disproportionate burden placed on them due to the greater proportion of larger vehicle models that they offer.

On the other hand, one industry representative pointed out in his comments the great improvements that have been achieved by the auto industry over the past 30 years in producing many different models of cars meeting higher standards and using new technologies to improve performance and emissions.

Response: Based on a review of comment responses prepared by the California Air Resources Board (CARB) and published as the “Final Statement of Reasons”), dated August 4, 2005, these concerns were raised during the rulemaking activities in California. In those responses, CARB states: “The fleet average emissions reduction approach used in the greenhouse gas regulations provides large manufacturers with the flexibility to sell vehicles with greenhouse gas emission levels that are higher than the fleet average, provided those emissions are offset by vehicles with lower greenhouse gas emissions. This should provide sufficient flexibility to allow large manufacturers ... to both compete with the much smaller manufacturers and still be able to meet its fleet average greenhouse gas obligations.” DEM agrees with CARB's position.

As pointed out by a commenter representing the auto industry, historically the auto industry has successfully improved auto emissions in compliance with stricter air emission limits and been able to improve performance in a large portion of their car models.

Comment: Conflicting comments were received relating to the availability of technologies necessary to comply with these regulations. One comment indicated that some of these technologies have technical obstacles that still must be overcome and the timeframe available is too short.

Additionally, a commenter noted that these regulations will stimulate additional technological innovation.

Response: CARB developed their program in such a way as to provide time for the auto manufacturers to phase in modifications to their vehicle designs to comply with standards that will become more stringent each year, beginning with model year (MY) 2009. As commenters pointed out, the standards that were developed by CARB recognized recent improvements in engine and drive train technology that are cost effective and in use today. Mid-term requirements (MY 2013) may require additional advancements in technology, but even these changes have been identified and efforts are underway to complete their development and incorporation into vehicle designs. Based on the CARB research, the Department feels that sufficient time and technology is available to meet the modest requirements imposed on the short term, while work will continue to incorporate additional controls to meet the achievable longer term requirements.

Comment: Comments were submitted relating to the issue of reductions in greenhouse gas (GHG) emissions from this program and whether the reductions would be measurable or have any effect on the climate in Rhode Island. As pointed out by several commenters, Rhode Island on its own can't solve global warming, it's a global problem. Rhode Island must implement its own regulatory program to begin to address the emissions it can control.

One commenter stated in oral comments that "to say that it's meaningless or insignificant or not effective for Rhode Island to be moving forward with its own standards ... to say that that's not meaningful is to say the same thing as saying it's not meaningful when an individual votes."

As pointed out by a commenter, the transportation sector is responsible for almost 40% of the GHG produced in Rhode Island. The adoption of these standards will result in reductions of these emissions greater than any other action identified in the Climate Change Action Plan adopted by the Conference of New England Governors and Eastern Canadian Premiers, signed by Rhode Island.

Response: The State of Rhode Island has chosen, as a public policy, to address the global issue of global warming and therefore GHG emissions. That policy resulted, among other things, in Rhode Island's commitment to a state emission reduction goal. The reduction goal was developed by Rhode Island's Greenhouse Gas Stakeholder process, recipient of an EPA Climate Protection award for development of the statewide Greenhouse Gas Action Plan. The diverse and inclusive Stakeholder Group recommended the adoption California's GHG standards. Rhode Island agreed to the regional GHG reduction goals of the Climate Action Plan adopted by the Conference of New England Governors and Eastern Canadian Premiers, recently recognized as one of The Climate Group's/Business Week magazine's Low Carbon Leaders of the Decade. Regulating GHG emission from new motor vehicles by adopting California's emissions standards is certainly consistent with Rhode Island's previous actions and will provide more emission reduction than any other strategy available.

While Rhode Island's contributions to the total global emissions may be small; Rhode Island will be affected by global warming and has chosen not to ignore its responsibility to do its part, as well as to set an example for others to follow. As one commenter pointed out, the impact from the adoption of these regulations in all of the states joining with California will be measurable and therefore a significant contribution to reducing GHG emissions and combating global warming.

Comment: Conflicting comments were submitted relative to the issue of regulatory program consistency. A commenter said that Rhode Island must adopt the GHG emissions portion of the California program to remain consistent under the requirements of section 177 of the Clean Air Act (CAA). Although, another commenter pointed out, EPA has never required that every portion of the California program must be adopted by other states wanting to incorporate the California standards in their programs.

***Response:** Under the CAA, states other than California can adopt California's new vehicle standards if, among other things, the state adopts standards that are identical to California's. In any event, Rhode Island is not taking a position on whether adoption is required or not. Rhode Island has chosen to remain consistent with the California program to address the GHG emissions from new vehicles sold here in Rhode Island and to provide Rhode Island residents the added benefit of more efficient vehicles. This consistent approach allows Rhode Island and the other states in the Northeast (e.g. New York, Vermont, Connecticut, and Massachusetts) and Northwest regions of the country (Washington and Oregon) taking similar actions, to adopt the same standards that California developed through an extensive developmental process. This efficient approach will also allow the auto industry to develop a single compliance strategy across all of the participating states.*

Comment: Comments were received relating to the impact of the proposed regulations on consumer choice. One commenter indicated that consumers who are not required to purchase a California vehicle will opt not to spend the additional money. This would result in a loss to Rhode Island auto dealers who will lose these "cross-border sales".

***Response:** It is not necessarily true that consumers would not pay a premium for cleaner more fuel efficient vehicles. In any event, Rhode Island is surrounded by states that are also adopting these standards so there would be little chance, if any, for these types of "cross-border" sales. Because the current and GHG standards are fleetwide standards, and because our border states are also adopting the same standards, consumers are not faced with a choice of buying a vehicle that doesn't come from a fleet complying with the California GHG emission standards.*

One commenter noted that the statute governing California's regulations requires that the program not ban the sale of specific types of vehicles, nor require vehicles to have weight reductions. DEM feels that safeguards put in place in the

California program, specifically aimed at protecting consumer choice through the continued availability of the full range of vehicle sizes and types, will ensure that consumer choice need not be adversely impacted by the adoption of these amendments.

Comment: A major area of comments on these proposed regulations relate to the cost of compliance, or, the cost impact on selling prices of vehicles once the regulations are in effect. Analysis by CARB indicates that the highest increase, on average, to the price of cars in MY 2016 will be \$1,064. Comments from the auto industry say the increase will be more, and during the oral comments, a representative of the auto manufacturers used a figure of \$3,000.

Additionally, commenters indicated that the operating cost savings were exaggerated by CARB and therefore, the increased purchase prices would never be recovered by consumers. Conversely, commenters pointed out that the cost estimates provided by the auto manufacturers in past rulemaking efforts have been much higher than the actual increases experienced from implementing earlier regulatory changes, while estimates predicted by CARB have been very close to the actual increases.

Several commenters noted that they were more than willing to simply pay more for their vehicles in order to achieve the GHG emission reductions. Commenters also noted that there are other costs to be considered. The cost of health care associated with exposure to automobile emissions should be factored into the analysis.

***Response:** DEM has reviewed the comments received on the issue of the cost impact on consumers. Based on the work done by CARB and the information provided concerning historical cost estimating by both proponents and opponents to earlier rulemakings, DEM agrees with the cost estimates prepared by CARB. Therefore, the modest projected increase in new vehicle cost, coupled with a decrease in operating costs results in an overall savings to consumers.*

Comment: Comments were submitted questioning the authority of DEM to adopt these regulations relative to provisions in the CAA, as well as under State law. Questions were raised relating to preemption issues and EPA's need to grant a waiver to California before other states can adopt their program. Additionally, concerns were raised over the constitutionality of the regulations relating to the Foreign Affairs Supremacy Clause. However, as pointed out by a commenter, Rhode Island cannot afford to wait. It is imperative that the Rhode Island program, as well as the programs of other states incorporating the GHG emission standards, stays in sync with the California program so that all programs regulate the same model year vehicles.

One commenter noted that the Department's authority to regulate motor vehicle emissions, provides that the regulations "shall not be more stringent than the mandatory standards established by federal law or regulation ...".

Response: *The preemption issue will likely be resolved in a venue other than that provided by Rhode Island's proposed adoption of California GHG emission standards. Ultimately, the Rhode Island regulations may have to be modified to adjust to any changes mandated in the California regulations.*

The issue of whether a waiver has been granted to California may similarly impact the Rhode Island regulations. If the regulations must be removed from the California program due to the lack of an EPA granted waiver, the Rhode Island program may have to be modified. DEM accepts the premise that it is important to remain consistent in time with California and the other neighboring states implementing these GHG provisions and will take appropriate actions in the future if the program is not implemented in California or if the EPA chooses not to issue a waiver to California.

Regarding the Foreign Affairs Supremacy Clause, the United States Congress has given the authority to the State through the Clean Air Act, to adopt the California program. The Clean Air Act is presumptively constitutional and requires action on the part of the State of Rhode Island to comply with its terms. The State has chosen to follow the California program as an alternative provided by the Act. Until such time as a court of competent jurisdiction renders an opinion on the California program to the contrary, the State will continue to follow the law.

DEM also notes that because the CAA specifically allows states to adopt the California standards, in so doing, DEM cannot be considered to be adopting requirements that are more stringent than the federal requirements.

Comment: Comments were received relative to possible modifications of the California program that should be considered by DEM. One commenter wanted DEM to adopt more stringent regulations. Auto industry comments were concerned about certain provisions of the regulations such as definitions, impact on commercial vehicles and some of the methods used by CARB to determine CO₂ equivalent emissions fleet averages.

Response: *DEM perceives that under the CAA Rhode Island has only two choices: adopt the identical California program, or rely on federal standards governing the emissions from motor vehicles. Rhode Island has chosen to adopt the California regulations as they were adopted in California for the purpose of consistency and to avoid issues under the CAA concerning the "identical" nature of our regulations.*

California's regulations dictate the size and makeup of auto manufacturers covered under these regulations and for consistency, these provisions will not be modified in the Rhode Island program. Additionally, any modifications to the California regulations, resulting from future rulemaking or litigation activities in California, will have to be promulgated here in Rhode Island to incorporate the changes in the Rhode Island program to maintain the identical nature of these regulations.

Comment: Comments were submitted pointing out that there may be an increase in the emissions of other criteria and ozone precursor pollutants as a result of the adoption of these GHG emissions reduction regulations. Due to the differences in the way these emissions will be regulated, and the way the other pollutant emissions are currently regulated, it could be that because of the anticipated “rebound” effect (car owners may choose to drive their cars more when their car’s efficiencies improve as a result of the GHG emissions reduction program) and the possible tendency for car owners to delay in purchasing slightly higher priced cars in the future (fleet turnover).

Also comments were submitted as a critical review of the State of Vermont’s response to analysis of impacts in Vermont relating to adoption of the California regulations on criteria and precursor pollutants from the rebound effect and fleet turnover.

***Response:** Conflicting information has been presented concerning the impact these regulations will have on consumer driving habits. Estimates of the rebound effect from CARB are much lower than estimates provided by opposing commenters. A document prepared by Meszler Engineering Services dated November 22, 2005, responding to issues raised during the rulemaking in Vermont relating to their adoption of the California standards, refutes analyses prepared by opponents of those and Rhode Island’s proposed regulations. Just as in the case of cost estimates developed relating to these regulations, the estimates by opponents show much higher increases in emissions of criteria and precursor pollutants than those developed by the proponents of these regulations. DEM accepts the estimates prepared by CARB which indicate a much lower impact. As far as the fleet turnover impact, we feel that the reductions in GHG emissions will be worth a slight increase in other pollutant emissions that will result from a future car owner delaying their new car purchases. However, with the price of fuel only destined to increase, the appeal of these new cars may minimize both of these impacts.*

Decision

Based on the comments and the response to comments, it is the decision of the Hearing Officer to adopt the amendments to Air Pollution Control Regulation No. 37 as proposed. The final amended regulation is appended to this decision. The final regulation is to be filed with the Secretary of State.

Stephen Majkut, Chief
Office of Air Resources
Hearing Officer

Date

Approved:

W. Michael Sullivan, Director
Department of Environmental Management

Date

FACT SHEET

In re: Proposed amendments to Air Pollution Control Regulation No. 37 "Rhode Island's Low Emissions Vehicle Program"

Introduction

The Department of Environmental Management (DEM), Office of Air Resources, is proposing to amend Air Pollution Control Regulation (APC) No. 37 "Rhode Island's Low Emission Vehicle Program". These proposed amendments would adopt the latest California Exhaust Emission Standards relating to greenhouse gas emissions, add the medium-duty weight class vehicles to the regulations and make a clarifying amendment for the Zero Emission Vehicle component of the Low Emission Vehicle II program.. The greenhouse gas emission standards and standards for the medium-duty vehicles would apply to new vehicles sold in Rhode Island beginning with model year 2009.

Overview

The federal Clean Air Act generally reserves the ability to set and enforce emissions standard for new vehicles for the federal government, except the Act allows the state of California to set new vehicle standards for vehicles sold in that state. However, section 177 of the Clear Air Act allows states other than California to adopt California's new vehicle standards if, among other things, the state adopts standards identical to California's. California's vehicle emission standards are adopted by the California Air Resources Board (CARB), a nationally recognized technical organization.

DEM adopted California's Low Emission Vehicle (LEV) standards in 1996. In 1999 APC Regulation No. 37 was amended to allow automobile manufacturers to comply with the National Low Emission Vehicle (NLEV) program in lieu of complying with the California Low Emission Vehicle program. In 2004 DEM adopted California's Low Emission Vehicle II (LEV II) standards to apply to new passenger cars and light-duty trucks sold in Rhode Island beginning in the 2008 model year.

In September 2005, California amended their LEV II standards to include standards for greenhouse gas emissions to apply to model year 2009 and later vehicles. These new emissions standards will limit the amount of carbon dioxide, methane, nitrous oxide and certain air conditioning refrigerants (expressed as CO₂-equivalent values) emitted by the fleets of vehicles sold by auto manufacturers.

Description of Proposed Amendments

The amendments being proposed will adopt changes made to California's Vehicle Emission regulations that incorporate motor vehicle greenhouse gas (GHG) emission standards for passenger cars, light-duty trucks and medium-duty passenger vehicles, as defined in the California regulations and emission standards that were added to the

California regulations covering the medium-duty weight class of vehicles (8,500 – 14,000 pounds GVW, as defined in the California regulations) commencing with the 2009 model year.

The addition of the medium-duty weight class to these regulations will require that new vehicles in this class, beginning with the 2009 model year, must also meet the California LEV II standards just as new passenger cars and light-duty trucks will be required to meet the standards beginning with the 2008 model year vehicles.

The GHG amendments will reduce GHG emissions from the effected vehicles by requiring the manufacturers of such vehicles sold in Rhode Island, in aggregate, meet corporate fleetwide standards for GHG emissions. These emission standards can be met through the use of currently existing technologies and vehicle improvements, many of which are already in use in some vehicle models. Manufacturers can meet these standards while continuing to provide the full range of vehicles types available today. The table below presents the fleet average GHG emission standards as included in the California regulations. The standards will be phased in over the 2009-2016 model year period as detailed in the table.

Only large volume manufacturers will be required to meet the fleet average GHG emissions for each model year vehicle as presented in the following table. Other manufacturers would not be required to comply with the standards until the final year of the phase-in (2016). Beginning with model year 2016, these smaller manufacturers will be required to meet the 2012 standard as shown in the table beginning with their 2016 vehicles.

FLEET AVERAGE GREENHOUSE GAS EXHAUST MASS EMISSION REQUIREMENTS FOR PASSENGER CAR (PC), LIGHT-DUTY TRUCK (LDT), AND MEDIUM-DUTY PASSENGER VEHICLE (MDPV) WEIGHT CLASSES¹ (4,000 mile Durability Vehicle Basis)		
<i>Model Year</i>	<i>Fleet Average Greenhouse Gas Emissions (grams per mile CO₂-equivalent)</i>	
	<i>All PCs; LDTs 0-3750 lbs LVW</i>	<i>LDTs 3,371 lbs. LVW – 8,500 Lbs. GVW; MDPVs</i>
2009	323	439
2010	301	420
2011	267	390
2012	233	361
2013	227	355
2014	222	350
2015	213	341
2016+	205	332

¹ Each manufacturer shall demonstrate compliance with these values in accordance with Title 13 CCR 1961.1(a)(1)(B)

Source: “Final Statement of Reasons”, California Environmental Protection Agency, Air Resources Board - Regulations to Control Greenhouse Gas Emissions from Motor Vehicles, August 4, 2005.

DEM is also proposing to amend section 37.3.5(g) regarding the credits available to manufacturers for placing Type III Zero Emission Vehicles (ZEVs), that is, fuel cell vehicles, in California and other states that administer the California ZEV requirements under section 177 of the Clean Air Act. California currently allows a manufacturer to take credit for fuel cell vehicles it places in California and any section 177 state. The changes proposed to section 37.3.5(g) are intended to clarify that Rhode Island is also allowing fuel cell vehicles placed in California and any other section 177 state to be credited against Rhode Island's Type III ZEV requirements.

Demonstration of Need

There is a growing consensus that the anthropogenic emission of carbon dioxide and other greenhouse gases are contributing to climate change. If this trend continues it could have severe impacts on human life and the environment. The transportation sector contributes almost 40% of Rhode Island's greenhouse gas emissions. Adopting the California standards would reduce carbon dioxide emissions from these classes of vehicles by 25% more than the current LEV II program in 2016.

Rhode Island signed the Climate Change Action Plan adopted by the Conference of New England Governors and Eastern Canadian Premiers. That plan set greenhouse gas reduction goals for the region of a reduction to 1990 emissions levels by 2010 and 10% below 1990 emissions by 2020. The Rhode Island Greenhouse Gas Stakeholder Process accepted the NEG/ECP goals as the basis for the Rhode Island Greenhouse Gas Action Plan. While adoption of new vehicle GHG standards is not among the 52 options in the Action Plan, the reductions available by adopting the California GHG standards would significantly contribute to meeting the Action Plan's reduction targets. This program's GHG emission reductions are 2 to 2.5 times higher than any option in the plan.

A state must adopt California standards two years before the model year for which they become effective and it takes a number of years for the newer vehicles to saturate the Rhode Island vehicle fleet. Timely adoption is needed to obtain the emissions benefits as soon as possible and to maintain consistency with the California regulations.

Alternative Approaches Considered

There are no equivalent federal GHG standards available as a regulatory alternative. California's GHG standards are the most stringent and most protective of public health and the environment in the absence of federal GHG standards. Because the Clean Air Act section 177 requires that states adopting the California regulations (as Rhode Island has) maintain identical standards and consistent programs for a given weight class, the only regulatory alternative to adopting the GHG standards for light and medium duty passenger vehicles would be to revert back to the less stringent federal standards that do not address GHG emissions.

DEM considered not amending the regulations to add the medium-duty vehicle weight class to the Rhode Island regulations but felt that it would be better to add these vehicles to achieve consistency with the California regulations and neighboring states. This will also avoid any instances where vehicles produced to comply with the new GHG

standards that also fall into the medium-duty weight class will be different than those offered for sale in California, in violation of provisions outlined in Section 177 of the Clean Air Act.

Identification of Overlapped or Duplicated State Regulations

The Office of Air Resources has identified no state regulations that overlap or duplicate the proposed amendments.

Determination of Significant Adverse Economic Impact on Small Business or Any City or Town

The increased costs of adding necessary controls to vehicles beginning with model year 2009 (as shown in the table below), will be entirely offset by operating cost savings over the lifetime of the vehicle. Estimates by CARB indicate that a net savings of \$170 per year during the pay-back period of a 5 year loan will be realized based on gasoline prices of \$2.20 per gallon.

State and local government agencies as well as small businesses that own or operate passenger vehicles will also be required to buy vehicles meeting the GHG standards. Although there will be an initial small cost burden to these agencies and businesses, the savings they will be realized in operating costs will offset the initial increase in purchase price within the first few years of ownership, based on an average fuel cost of \$2.20 per gallon. With higher fuel prices, the offset will be realized sooner. Therefore, the proposed regulations will not result in any significant adverse economic impacts to small businesses or cities and or towns.

Average Cost of Controls			
Tier	Year	Average Cost of Controls	
		PC/LDT1 (Passenger cars and small Trucks/SUVs)	LDT2 (Large trucks/SUVs)
Near-term	2009	\$17	\$36
	2010	\$58	\$85
	2011	\$230	\$176
	2012	\$367	\$277
Mid-term	2013	\$504	\$434
	2014	\$609	\$581
	2015	\$836	\$804
	2016	\$1,064	\$1,029

Source: "Final Statement of Reasons", California Environmental Protection Agency, Air Resources Board - Regulations to Control Greenhouse Gas Emissions from Motor Vehicles, August 4, 2005.

Public Hearing

A public hearing regarding the proposed amendments to Air Pollution Control Regulation No. 37 "Rhode Island's Low Emission Vehicle Program" will be held in Providence, RI on 30 November 2005 at 1:00 PM. Written comments may be sent to the Office of Air Resources at the address below until 4:00 PM on 30 November, unless the hearing officer extends the comment period.

For more information or copies of the proposed amendments contact:

Frank Stevenson, P.E., Supervising Air Quality Specialist
Office of Air Resources
235 Promenade Street
Providence, RI 02908
(401) 222-2808 ext. 7021
toll free 1-800-752-8088
TCDD (401) 222-6800
frank.stevenson@dem.ri.gov
Or, visit the DEM web site at www.dem.ri.gov